

IN THE CLAIMS

Please amend the claims as follows:

The current listing of the claims replaces all previous amendments and listings of the claims.

1. and 2. (Canceled)

3. (Currently Amended) The diffraction element according to Claim 2 ~~4~~, wherein the ~~diffraction grating is~~ incoming-side diffraction grating and the at least one outgoing-side diffraction grating are formed directly in the ~~surface of the transparent substrate~~ incoming-side and outgoing-side surfaces.

4. (Currently Amended) The A diffraction element ~~according to Claim 2, wherein~~ comprising:

a diffraction grating having a concave/convex shape in cross-section formed in an incoming-side surface and an outgoing-side surface of a transparent substrate,

wherein the incoming-side surface is opposite the outgoing-side surface, and the incoming-side surface is configured to receive light external to the diffraction grating,

the diffraction grating comprises an incoming-side diffraction grating disposed in a central region of the incoming-side surface and at least one outgoing-side diffraction grating disposed in the outgoing-side surface and configured to receive light diffracted by the incoming-side diffraction grating,

the grating pitch of the incoming-side diffraction grating is substantially equal to the grating pitch of the at least one outgoing-side diffraction grating, and

the ~~diffraction grating is~~ incoming-side diffraction grating and the at least one outgoing-side diffraction grating are formed in an a single layer inorganic film formed on a surface of the transparent substrate the incoming-side and outgoing-side surfaces.

5. (Currently Amended) The diffraction element according to Claim 2 4, wherein the at least one ~~of the~~ outgoing-side diffraction ~~gratings, whose grating pitch is substantially equal to the grating pitch of the incoming-side diffraction grating,~~ grating is a reflection type diffraction grating.

6. (Currently Amended) The diffraction element according to Claim 2 5, wherein the at least one ~~of the~~ outgoing-side diffraction ~~gratings, whose grating pitch is substantially equal to the grating pitch of the incoming-side diffraction grating,~~ grating is a diffraction grating having a saw-tooth like concave/convex portion or a pseudo ~~sawtooth-like~~ sawtooth diffraction grating wherein a saw-tooth ~~like~~ shape is approximated by stairs.

7. (Currently Amended) The diffraction element according to Claim 6, wherein ~~in~~ the at least one outgoing-side diffraction grating comprises the pseudo sawtooth-like diffraction grating in which the saw-tooth shape is approximated by the stairs, and a the height or ~~the~~ depth of a first step of the stairs is different from ~~the a~~ height or ~~the~~ depth of another a second step, ~~these steps constituting of~~ the stairs.

8.-11. (Canceled)

12. (New) A method of diffracting light with a diffraction element including a diffraction grating having a concave/convex shape in cross-section formed in an incoming-side surface and an outgoing-side surface of a transparent substrate, in which the incoming-side surface is opposite the outgoing-side surface, and the incoming-side surface is configured to receive light external to the diffraction grating, the diffraction grating includes an incoming-side diffraction grating disposed in a central region of the incoming-side surface and two outgoing-side diffraction gratings disposed in the outgoing-side surface and configured to receive light diffracted by the incoming-side diffraction grating, the grating

pitch of the incoming-side diffraction grating is substantially equal to the grating pitch of at least one of the two outgoing-side diffraction gratings, the incoming-side diffraction grating and the two outgoing-side diffraction gratings are formed in a single layer inorganic film formed on the incoming-side and outgoing-side surfaces, and the two outgoing-side diffraction grating are reflection type diffraction gratings each having a saw-tooth concave/convex portion or a pseudo sawtooth diffraction grating wherein a saw-tooth shape is approximated by stairs, the method comprising:

directing to a wavelength measuring apparatus light diffracted by the at least one of the two outgoing-side diffraction gratings which has the grating pitch substantially equal to the grating pitch of the incoming-side diffraction grating.

13. (New) The method according to claim 12, wherein the incoming-side diffraction grating has a saw-tooth shape.

14. (New) A diffraction element comprising:

a substrate having first and second surfaces opposite one another;

a first single organic layer disposed on the first surface;

a second single organic layer disposed on the second surface;

a first diffraction grating disposed in a central portion on the first single organic layer, the first diffraction grating configured to receive light from outside of the substrate, the first diffraction grating having a first grating pitch; and

a second diffraction grating disposed on the second single organic layer, the second diffraction grating configured to receive light diffracted by the first diffraction grating, the second diffraction grating having a second grating pitch about equal to the first grating pitch